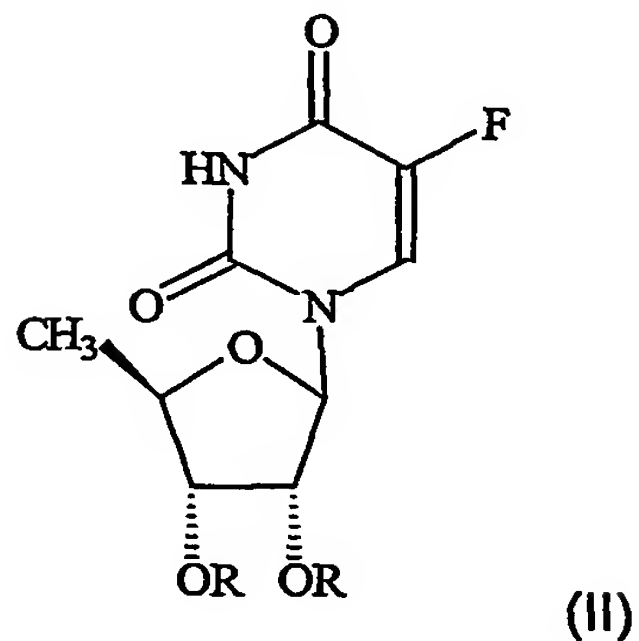


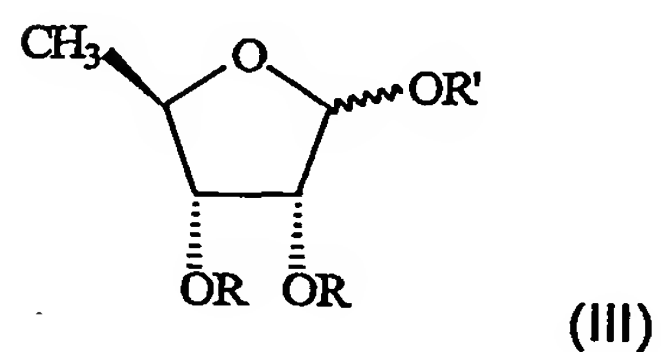
## CLAIMS

1. A process for preparing a compound of formula



in which R represents linear or branched C<sub>1</sub>-C<sub>5</sub> aliphatic acyl or benzoyl, optionally substituted with C<sub>1</sub>-C<sub>5</sub> alkyls, C<sub>1</sub>-C<sub>5</sub> alkoxyis or halogens,

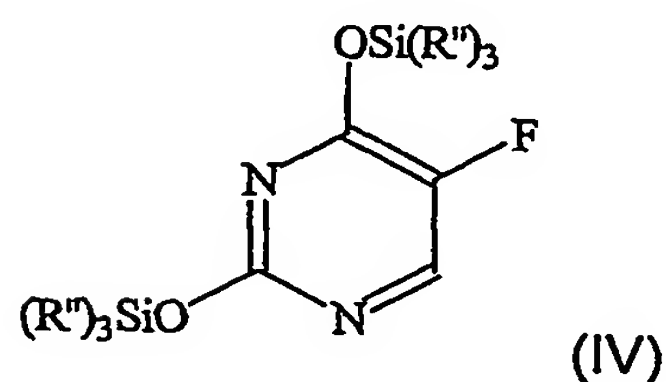
- 10 which comprises the reaction of coupling of a compound of formula



in which

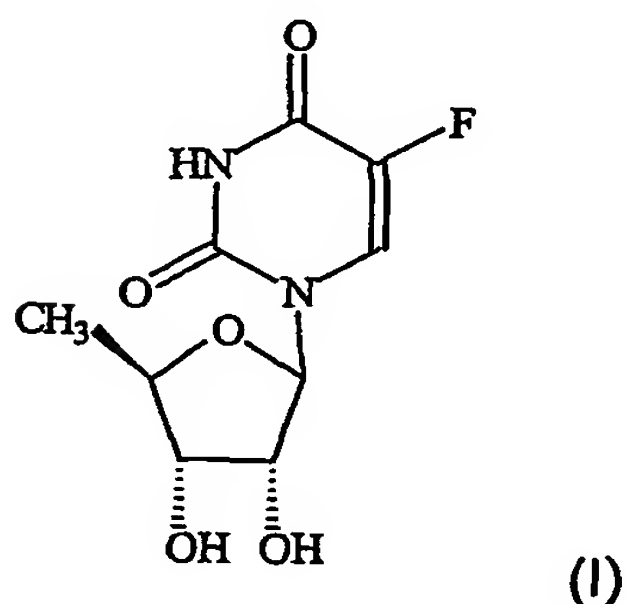
- 15 R represents a linear or branched C<sub>1</sub>-C<sub>5</sub> aliphatic acyl or benzoyl, optionally substituted with C<sub>1</sub>-C<sub>5</sub> alkyls, C<sub>1</sub>-C<sub>5</sub> alkoxyis or halogens,  
R' represents R or a linear or branched C<sub>1</sub>-C<sub>5</sub> alkyl,

with a compound of formula



in which R", being identical or different, represents a C<sub>1</sub>-C<sub>6</sub> alkyl or a phenyl, in the presence of a Lewis acid and in an inert organic solvent, characterized in that said Lewis acid is added at a temperature below 0°C.

- 5     2. A process according to claim 1 in which said addition of catalyst is carried out at a temperature below -10°C, preferably between approx. -15 and -20°C.
3. A process according to claim 1 in which, on completion of said addition of catalyst, the reaction mixture is held further at the same temperature.
- 10     4. A process according to claim 1 in which R and R' represent acyl, preferably acetyl, and R" represents methyl.
- 15     5. A process according to claim 1 in which said Lewis acid is selected from trimethylsilyltrifluoromethanesulphonate and tin tetrachloride, and is preferably tin tetrachloride.
6. A process according to claim 1 in which said inert organic solvent is selected from chlorinated solvents or aromatic solvents, preferably chlorinated solvents.
- 20     7. A process according to claim 1 in which said compound of formula II, in which R has the meanings stated above, is further submitted to a reaction of deprotection to give doxifluridine of formula I.
- 25     8. A process for the preparation of doxifluridine of formula



that comprises a process according to one of the claims from 1 to 7.